

# Center for Advanced Composites Mfg. & Engineering

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## Background

Established in 1990 as the focal point and coordinator of technical knowledge and resources in Utah in the areas of composite materials, plastics, and other advanced materials. ACME assists existing industry and start-up companies and also conceives, invents, develops, and spins off new and enhanced products into commercial enterprises.

### FY94-95 Overview

#### **Current**

1994-95 Award .....	\$150,000
Matching Funds .....	\$1,350,580
Patents Pending .....	5
Patents Issued .....	3
License Agreements .....	2
Spin-off Companies .....	4
Companies Assisted .....	26
Industry Jobs Created .....	7
Center Jobs Created .....	32

### Cumulative Accomplishments

#### **Cumulative**

Awards .....	\$615,000
Matching Funds .....	\$5,200,630
Patents Issued .....	3
License Agreements .....	2
Spin-off Companies .....	46

## Technologies

- Damping of composites through unique orientation of fibers.
- Improvement of fiber binding on thermoplastic composites.
- A forming technique for large thermoplastic composites.
- Cure and contamination sensing devices which allow low-cost detection of physical or chemical changes in many non-conducting fluids such as resins, oils, transformer fluids, etc.
- Resource for all companies on advanced materials and manufacture of these materials.

## Center Highlights

- ACME has assisted Merit Medical with five products during the past year. Each of these products has faced a major manufacturing or design problem that required assistance beyond Merit's capability and, because of the excellent relationship between Merit Medical and ACME, the center was asked to supervise the solving of these problems. Each problem was successfully resolved and Merit was able to resume or initiate production on the product. Merit estimates that the value of ACME's contribution for these products has been in excess of \$500,000 this year.
- The Center has devised standardized tests for the quality and strength of roll-out garbage cans used by municipalities across the country, including Salt Lake County, Ogden, and Provo. Such tests determine the strength and durability of such plastic containers, enabling manufacturers to produce stronger garbage cans. Local governments say the garbage cans last longer, resulting in a savings of public funds. Provo, for instance, has spent \$1 million on the roll-out garbage cans for use by its residents and needs such an investment to last for an extended period. Roll-out garbage containers picked up by automated garbage trucks are used by up to 20% of U.S. homes and comprise a \$120 million annual industry.